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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/590,158	08/21/2006	Tomohiro Oshiyama	06571/HG	4142	
	7590 12/06/201 Z, GOODMAN & C H	EXAMINER			
220 Fifth Avenu	*	WILSON, MICHAEL H			
16TH Floor NEW YORK, NY 10001-7708			ART UNIT	PAPER NUMBER	
				1786	
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			12/06/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/590,158	OSHIYAMA ET AL.					
Office Action Summary	Examiner	Art Unit					
	MICHAEL H. WILSON	1786					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>27 Se</u>	entember 2010						
	action is non-final.						
	<i>'-</i>						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1 and 12-30</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1 and 12-30</u> is/are rejected.							
7) Claim(s) is/are objected to.							
· · · · · · · · · · · · · · · · · · ·	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<u> </u>	priority under 35 LLS C & 110(a)	-(d) or (f)					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:							

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DETAILED ACTION

Response to Amendment

1. This Office action is in response to Applicant's amendment filed 27 September 2010, which amends claims 1, 12, and 13.

Claims 1 and 12-30 are pending.

- 2. Applicants overcame the rejection of claim 13 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention by amending the claim in the reply filed 27 September 2010.
- 3. Applicants overcame the rejection of claims 1, 14, 15, 23, 24, 29, and 30 under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (WO 03/084973 A1) because of a persuasive argument in the reply filed 27 September 2010.
- 4. Applicants overcame the rejection of claims 1, 12-15, and 23-28 under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP 2003/109758 A) as set forth in the action mailed 26 March 2010 because of a persuasive argument in the reply filed 27 September 2010.
- 5. Regarding the provisionally rejection on the ground of nonstatutory obviousness-type double patenting, the rejection is currently maintained but will be re-evaluated when it is the only remaining rejection, according to MPEP 804 I(1).

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Response to Arguments

6. Applicant's arguments, see arguments and declarations filed 4 January 2010 and 27 September 2010, regarding the rejections cited below have been fully considered and are persuasive.

The declaration filed 4 January 2010 is persuasive in overcoming the rejection of record (Action mailed 1 October 2009) based on Kamatani et al. (US 2003/0059646 A1) because applicants demonstrated the unexpected results related to the position where the carbazole substituent is bound.

The declaration filed 27 September 2010 is persuasive in overcoming the rejection of record (Action mailed 26 March 2010) based on Kobayashi et al. (WO 03/084973 A1) because Applicants demonstrated unexpected results for platinum complexes versus the iridium complexes. The declaration is also persuasive in overcoming the rejection of record (Action mailed 26 March 2010) based on Kita et al. (JP 2003/109758 A) by demonstrating unexpected results for platinum complexes with phenyl and naphthyl substituents (as the group where free rotation is blocked) relative to other platinum complexes.

7. Applicant's arguments filed 4 January 2010 and 27 September 2010 have been fully considered but they are <u>not persuasive</u> as explained below.

Applicant's arguments and the declaration filed 4 January 2010 have been reconsidered, arguments regarding compound 111 of Kita et al. (JP 2003/109758 A) are not considered persuasive. Applicants assert that compound 111 of Kita et al. does not

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posses a group where free rotation is blocked and therefore does not meet the present claim limitations. However the methodology for determining free rotation is not clearly set forth in the declaration. Applicants cite a lower external quantum efficiency and shorter emission life for a device utilizing compound 111 (page 7 of declaration) and conclude that this data suggests the rotation of the phenyl group is not blocked. However the external quantum efficiency and emission life are not necessarily the result of a lower rotational energy barrier for the complex. The external quantum efficiency and emission life for the device could easily be the result of the combined effects of the three phenyl substituents on the excited state of the complex not related with rotational energy. The rotational energy of the phenyl group for compound 111 has not been measured (directly or by molecular modeling). Therefore because compound 111 meets the formula in the claims and the evidence does not clearly demonstrate a lack of rotational barrier for the phenyl substituents the rejection is maintained.

Claim Rejections - 35 USC § 102/103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. Claims 1, 14-16, 23, 24, 27, and 28 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kita et al. (JP 2003/109758 A), machine translation relied upon.

Regarding claims 1, 14, 15, 27, and 28, Kita et al. disclose an organic electroluminescent element [0017] comprising an ortho-metallated platinum complex comprising an aryl group where free rotation is blocked (complex 111 [0082] page 23). Free rotation of the aryl group is blocked by phenyl groups being present on the R_1 , R_3 and R_4 positions. The reference also discloses a light-emitting layer which comprises the platinum complex [0032] and a device comprising the light-emitting layer [0180].

The reference discloses an "n" of 3 with an "m" of 1 instead of an "n" of 1 or 2 as presently claimed. However n + m = 4 is clearly an error in the reference. A stable octadentate platinum complex is not possible. The coordination sphere of platinum is full where there are only six ligands. Platinum(II) is a common platinum cation used to form luminescent complexes. This metal ion is well known to form square planar complexes (m=1 and n=1) due to its electron configuration (d³). Therefore one of ordinary skill in the art at the time of the invention would readily recognize m=3 with n=1 to be an error in the reference and would readily expect platinum complexes of m = 1 and m = 1 to suitable complexes for layer and device of Kita et al. and within the teachings of Kita et al.

Regarding claim 16, Kita et al. disclose all the claim limitations as set forth above. Additionally the reference discloses wherein the light-emitting layer comprises a host material [0107] of instant formula (10) (compound 1-60 [0123] page 47; compound 1-65 [0125] page 49).

Regarding claims 23 and 24, Kita et al. disclose all the claim limitations as set forth above. Additionally the reference discloses a display device and an illumination device comprising an organic electroluminescent element as described above [0002].

Claim Rejections - 35 USC § 103

11. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP 2003/109758 A) as applied to claim 1 above, machine translation relied upon.

Regarding claims 12 and 13, Kita et al. disclose all the claim limitations as set forth above. Additionally the reference discloses wherein the aryl substituent may be substituted (compounds 41-44 [0077] page 18, and compound 114 [0082] page 23). However the reference does not explicitly disclose the aryl group where free rotation has been blocked with a substituent. While the reference does not explicitly disclose an example, this does not negate a finding of obviousness under 35 USC 103 since a preferred embodiment such as an example is not controlling. Rather, all disclosures "including unpreferred embodiments" must be considered. *In re Lamberti* 192 USPQ 278, 280 (CCPA 1976) citing *In re Mills* 176 USPQ 196 (CCPA 1972). Therefore, it would have been obvious to one of ordinary skill in the art to utilize a substituent on the

given that aryl group where free rotation has been blocked given that the reference teaches substituents are suitable for aryl substituents.

Additionally the reference does not explicitly disclose using an electron donating groups as a substituent (substituent on the aryl substituent of the phenylpyridine ligand). Electron withdrawing groups are specifically taught as substituents of the aryl group [0034]. However the use of electron donating groups would also be obvious to one of ordinary skill in the art at the time of the invention. One of ordinary skill in the art would reasonably expect that if electron withdrawing groups cause blue shifts in the emission, electron donating groups would cause a red shift in the emission. One of ordinary skill in the art would be motivated to use an electron donating groups as a substituent in order to tune the electron withdrawing/donating nature of the phenyl substituent to control the shade of blue light emitting by the complex.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2003/0218418 A9) in view of Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 15 above.

Regarding claim 17, Sato et al. disclose an organic electroluminescent device comprising a light emitting layer with a phosphorescent ortho-metallated complex ([0031]-[0034]). The reference teaches the light-emitting layer comprises a host material of instant formulae (10) [0052]. The reference also teaches that the divalent linking groups (instant L₀₁) may also be a single bond [0062] and teaches that any position of the phenyl rings is suitable for substitution [0056]. While Sato et al. does not

exemplify a substituent in the instant R_{13} - R_{16} positions, this does not negate a finding of obviousness under 35 USC 103 since a preferred embodiment such as an example is not controlling. Rather, all disclosures "including unpreferred embodiments" must be considered. *In re Lamberti* 192 USPQ 278, 280 (CCPA 1976) citing *In re Mills* 176 USPQ 196 (CCPA 1972). Therefore, it would have been obvious to one of ordinary skill in the art to utilize a substituent in one of more of the instant R_{13} - R_{16} positions given that Sato et al. teaches each one. However the reference does not explicitly disclose a phosphorescent complex with an aryl group where free rotation is blocked.

Kita et al. disclose an ortho-metallated platinum complex wherein free rotation of an aryl group is blocked, as described above. Additionally the reference teaches the complexes of Kita et al. to have excellent luminescence with blue color [0032].

It would be obvious to one of ordinary skill in the art at the time of the invention to use the complex of Kita et al. in the device of Sato et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that both references teach light-emitting layers with carbazole host materials and Kita et al. teach complexes suitable for use in the light-emitting layer of an electroluminescent device. One of ordinary skill in the art would be motivated by a desire to have excellent luminescent of blue.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 15 above, lwakuma et al. (US 2004/0086745 A1).

Regarding claim 18, Kita et al. disclose all the claim limitations as set forth above. However the reference does not explicitly disclose a carboline compound as a host material.

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Iwakuma et al. teach carboline compounds (compound A58-A67, pages 16-18) as host materials for the light-emitting layer [0008] of an electroluminescent device ([0012] and [0058]). The reference teaches that using a carboline compound of Iwakuma et al. improves the color purity of the device [0007].

It would be obvious to one of ordinary skill in the art at the time of the invention to use a carboline compound as the host material of the light-emitting layer as taught by Iwakuma et al. in the device of Kita et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that Iwakuma et al. the carboline compounds as suitable host material for phosphorescent light-emitting layers. One of ordinary skill in the art would be motivated by a desire to improve the color purity of the device.

14. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 15 above, and in view of Okada et al. (US 2003/0019861 A1).

Regarding claim 19, Kita et al. disclose all the claim limitations as set forth above. However the reference does not explicitly disclose a hole blocking layer.

Okada et al. teach a light-emitting device [0007]. The reference teaches teach various condensed heterocyclic compounds, formulas (I) and (II), are useful in

electroluminescent devices ([0009]-[0012]) and teaches specific examples of heterocyclic groups suitable as A of formula (I) and B of formula (II) ([0041] and [0051]); the groups includes carboline. The reference teaches that materials of the electron transport and electron injection layers should possess electron transporting properties and hole blocking properties [0157]. Preferred materials include compounds of formula (I).

It would have been obvious to one of ordinary skill in the art at the time of invention to use the carbolines of Okada as an electron transporting and hole blocking layer in the device of Kita et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that Okada et al. teach the compounds to be electron transporting and hole blocking and suitable for use in electroluminescent devices. One of ordinary skill in the art would be motivated by a desire to block holes from reaching the cathode, thus improving performance.

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 15 above, and in view of Stossel et al. (US 2004/0058194 A1).

Regarding claim 20, Kita et al. disclose all the claim limitations as set forth above. Additionally the reference discloses boron compounds as electron transporting material for the electron transport layer [0199]. However the reference does not explicitly disclose a hole blocking layer.

Stossel et al. teach another phosphorescent organic light-emitting device [0001]. The reference teaches that boron compounds have excellent properties for electron transport and hole blocking layer [0032] and lead to high efficiencies and an increase in operating life ([0035]-[0036]).

It would be obvious to one of ordinary skill in the art at the time of the invention to use boron compounds in an electron transporting and hole blocking layer as taught by Stossel et al. in the device of Kita et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that Kita et al. teach boron compounds to be suitable for the electron transporting layer, and Stossel et al. teach boron compounds to be excellent hole blocking materials. One of ordinary skill in the art would be motivated by a desire to improve efficiency and an increase in operating life.

16. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al. (US 2000/0086180 A1) in view of Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 1 above, and Iwakuma et al. (US 2004/0086745 A1).

Regarding claim 21, Seo et al. disclose an organic electroluminescent element [0002]. The reference discloses the device comprises a light-emitting layer with an ortho-metallated phosphorescent compound and a host material ([0187] and [0251]-[0252]), and a hole blocking layer ([0041] and [0251]-[0252]). The blocking and light-emitting layers are mixed, therefore the hole blocking, light-emitting, and light-emitting host materials are in both hole blocking and light-emitting layers ([0044] and [0251]-[0252]). However the reference does not explicitly disclose a phosphorescent complex

with an aryl group where free rotation is blocked or a carboline as the light-emitting host material.

Kita et al. disclose an ortho-metallated platinum complex wherein free rotation of an aryl group is blocked, as described above. Additionally the reference teaches the complexes of Kita et al. to have excellent luminescence with blue color [0032].

It would be obvious to one of ordinary skill in the art at the time of the invention to use the complex of Kita et al. in the device of Seo et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that both references teach light-emitting layers with carbazole host materials and Kita et al. teach complexes suitable for use in the light-emitting layer of an electroluminescent device. One of ordinary skill in the art would be motivated by a desire to have excellent luminescent of blue.

Iwakuma et al. teach carboline compounds (compound A58-A67, pages 16-18) as host materials for the light-emitting layer [0008] of an electroluminescent device ([0012] and [0058]). The reference teaches that using a carboline compound of Iwakuma et al. improves the color purity of the device [0007].

It would be obvious to one of ordinary skill in the art at the time of the invention to use a carboline compound as the host material of the light-emitting layer as taught by Iwakuma et al. in the device of Seo et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that Iwakuma et al. the carboline compounds as suitable host material for phosphorescent light-emitting layers.

One of ordinary skill in the art would be motivated by a desire to improve the color purity of the device.

17. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al. (US 2000/0086180 A1) in view of Kita et al. (JP 2003/109758 A), machine translation relied upon, as applied to claim 1 above, and Stossel et al. (US 2004/0058194 A1)..

Regarding claim 22, Seo et al. disclose an organic electroluminescent element [0002]. The reference discloses the device comprises a light-emitting layer with an ortho-metallated phosphorescent compound and a host material ([0187] and [0251]-[0252]), and a hole blocking layer ([0041] and [0251]-[0252]). The blocking and light-emitting layers are mixed, therefore the hole blocking, light-emitting, and light-emitting host materials are in both hole blocking and light-emitting layers ([0044] and [0251]-[0252]). However the reference does not explicitly disclose a phosphorescent complex with an aryl group where free rotation is blocked or a boron compound as the hole blocking material.

Kita et al. disclose an ortho-metallated platinum complex wherein free rotation of an aryl group is blocked, as described above. Additionally the reference teaches the complexes of Kita et al. to have excellent luminescence with blue color [0032].

It would be obvious to one of ordinary skill in the art at the time of the invention to use the complex of Kita et al. in the device of Seo et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that both references teach light-emitting layers with carbazole host materials and Kita et al. teach complexes

suitable for use in the light-emitting layer of an electroluminescent device. One of ordinary skill in the art would be motivated by a desire to have excellent luminescent of blue.

Stossel et al. teach another phosphorescent organic light-emitting device [0001]. The reference teaches that boron compounds have excellent properties for electron transport and hole blocking layer [0032] and lead to high efficiencies and an increase in operating life ([0035]-[0036]).

It would be obvious to one of ordinary skill in the art at the time of the invention to use boron compounds in the hole blocking layer of Seo et al. One of ordinary skill in the art would reasonably expect such a combination to be suitable given that Stossel et al. teach boron compounds to be excellent hole blocking materials. One of ordinary skill in the art would be motivated by a desire to improve efficiency and an increase in operating life.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1, 15, 18, and 23-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 9, 13, 18-43, 45, and 46 of copending Application No. 11/632389. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the claims are not identical one of ordinary skill attempting to make and use the invention of the copending application would also be making and using the presently claimed invention.

The copending application teaches an organic electroluminescent element (claims 1 and 2) comprising a phosphorescent ortho-metallated platinum complex of instant formulae (1)-(9) (claim 9) and a carboline or carboline derivative compound (claims 13, and 18-43) in the light-emitting layer. The reference teaches the organic electroluminescent element as part of a display device or an illumination device (claims 45 and 46).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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20. Claims 1, 15, 18, and 23-30 are directed to an invention not patentably distinct from claims 1, 2, 9, 13, 18-43, 45, and 46 of commonly assigned 11/632389.

Specifically, see above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/632389, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL H. WILSON whose telephone number is

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(571)270-3882. The examiner can normally be reached on Monday - Thursday 7:30-5:00 (EST), Friday 7:30-4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/ Supervisory Patent Examiner, Art Unit 1786

MHW